

What is claimed is:

1. A composite device of the laminate type having a laminate structure of a first ceramic layer and a second ceramic layer, each of the ceramic layers having one or a plurality of circuit element patterns formed on a surface thereof to provide an electronic circuit for performing a predetermined function, the first ceramic layer made from a composition suited to characteristics of the circuit element patterns formed on a surface thereof and the second ceramic layer comprising:

a layer portion having a same composition as the first ceramic layer and serviceable as a main body, and

a plurality of strip portions having a composition suited to characteristics of the circuit element patterns formed on a surface of the second ceramic layer and being formed as distributed on a surface or inside the layer portion.

2. A composite device of the laminate type according to claim 1 wherein the layer portion of the second ceramic layer is made from dielectric material, the strip portion is made from magnetic material.

3. A composite device of the laminate type

according to claim 1 wherein a plurality of strip portions formed on the second ceramic layer are approximately uniformly distributed on the surface of the layer portion.

5 4. A composite device of the laminate type according to claim 1 wherein a plurality of strip portions formed on the second ceramic layer are approximately uniformly distributed inside the layer portion.

10 5. A green sheet for use in fabricating a composite device of the laminate type having a laminate structure of a first ceramic layer and a second ceramic layer, the green sheet being serviceable as a material for the second ceramic layer, the green sheet comprising a layer
15 portion having the same composition as a green sheet making the first ceramic layer and a plurality of strip portions each having a composition suited to characteristics of circuit element patterns formed on the surface of the second ceramic layer and being formed as
20 distributed on the layer portion.

 6. A process for fabricating a composite device of the laminate type having a laminate structure of a first

ceramic layer and a second ceramic layer, each of the ceramic layers having one or a plurality of circuit element patterns formed on a surface thereof to provide an electronic circuit for performing a predetermined

5 function, the process having the steps of;

preparing first green sheets for making first ceramic layers and second green sheets for making second ceramic layers,

forming one or a plurality of circuit element patterns on a surface of each of a required number of the first green sheets and a required number of the second green sheets,

preparing a laminate comprising a plurality of layers by superposing the first green sheets and the second green sheets each having the circuit element pattern or patterns formed thereon, and

firing the laminate,

the first green sheet being prepared by using dielectric material in the sheet preparing steps, the second green

20 sheet preparing steps having:

preparing material sheets by using the dielectric material,

forming a photoresist film on the surface of the material sheet prepared in the preparing step,

providing on the photoresist film a plurality of through holes approximately uniformly distributed by the photolithography method,

superposing magnetic material on the material sheet covering the photoresist film, and

removing the photoresist film.

7. A process for fabricating a composite device of the laminate type having a laminate structure of a first ceramic layer and a second ceramic layer, each of the ceramic layers having one or a plurality of circuit element patterns formed on a surface thereof to provide an electronic circuit for performing a predetermined function, the process having the steps of;

preparing first green sheets for making first ceramic layers and second green sheets for making second ceramic layers,

forming one or a plurality of circuit element patterns on a surface of each of a required number of the first green sheets and a required number of the second green sheets,

preparing a laminate comprising a plurality of layers by superposing the first green sheets and the second green sheets each having the circuit element pattern or patterns formed thereon, and

5 firing the laminate,

the first green sheet being prepared by using dielectric material in the sheet preparing steps, the second green sheet preparing steps having:

preparing material sheets by using the dielectric material,

providing on each of the material sheets a screen having a plurality of through holes approximately uniformly distributed, and printing magnetic material on a surface of each of material sheets through the screen,

15 and

removing the screen from the material sheet.

8. A process for fabricating a composite device of the laminate type having a laminate structure of a first ceramic layer and a second ceramic layer, each of the ceramic layers having one or a plurality of circuit element patterns formed on a surface thereof to provide an electronic circuit for performing a predetermined

function, the process having the steps of;

preparing first green sheets for making first ceramic layers and second green sheets for making second ceramic layers,

5 forming one or a plurality of circuit element patterns on a surface of each of a required number of the first green sheets and a required number of the second green sheets,

10 preparing a laminate comprising a plurality of layers by superposing the first green sheets and the second green sheets each having the circuit element pattern or patterns formed thereon, and

firing the laminate,
the first green sheet being prepared by using dielectric
15 material in the sheet preparing steps, the second green sheet preparing steps having:

preparing a slurry made from dielectric material,

mixing the slurry with a plurality of strips made from the magnetic material to obtain a slurry mixture,

20 forming the slurry mixture into a strip,

drying the obtained slurry mixture of a strip.